

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Amendments to Part 4 of the Commission's Rules)	PS Docket No. 15-80
Concerning Disruptions to Communications)	
)	
New Part 4 of the Commission's Rules Concerning)	ET Docket No. 04-35
Disruptions to Communications)	
)	
The Proposed Extension of Part 4 of the)	PS Docket No. 11-82
Commission's Rules Regarding Outage Reporting)	
to Interconnected Voice Over Internet Protocol)	
Service Providers and Broadband Internet Service)	
Providers)	
)	

**COMMENTS OF THE
UNITED STATES TELECOM ASSOCIATION**

Its Attorneys:

Kevin G. Rupy
Robert Mayer
United States Telecom Association
607 14th Street, NW, Suite 400
Washington, D.C. 20005
202-326-7300

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Summary

USTelecom opposes the Federal Communications Commission's (Commission) proposals to expand outage reporting to broadband internet access service (BIAS) providers. In addition to being premature to establish such reporting obligations, the Commission has failed to identify any public safety benefits that would justify the significant burdens associated with its proposals. Many of the Commission's proposals are significantly flawed, and would result in a distorted and inaccurate view of any disruptions in broadband networks. Ultimately, adoption of the Commission's proposals would severely undermine the Commission's stated foundational aim of protecting life and property through robust, functioning, reliable, resilient, and secure communications networks.

USTelecom maintains that it would be more prudent for the Commission to wait until final resolution of the Open Internet appeal, before embarking on such an expansive administrative undertaking. It makes little sense for the Commission and industry to embark on such a significant undertaking, given that the Open Internet order could potentially be reversed or significantly altered. In a scenario where the Open Internet decision is altered or reversed, and the Commission has chosen to move forward hastily with its proposals, both the Commission and industry would be forced to invest substantial time and resources to reengineer the established reporting framework.

The Commission also fails to provide any substantive discussion or analysis of the professed public safety benefits that would result from implementation of the Commission's BIAS outage reporting regime. While USTelecom strongly supports efforts to improve the efficiency and reliability of broadband networks, the evidence offered by the Commission in support of its expanded broadband outage reporting proposal falls short of demonstrating that providers, left to their own devices, could not or would not achieve the same public safety benefits in the absence of the Commission's outage reporting scheme.

The Commission's proposal to implement a throughput-based metric is also deeply flawed, and should be abandoned. Its proposed broadband metric calibrated with the current 900,000 user minute threshold is overly broad, and will significantly distort the Commission's view of network operations. In addition, the Commission's compressed reporting deadlines – and potential penalties associated with insufficient and/or late filings – create a high probability that providers will file inaccurate and even unnecessary information, rather than to wait until the provider can file accurate, verified information concerning service outages.

USTelecom maintains that the Commission's proposed three-part submission process for broadband outage reporting is overly burdensome, and would actually undermine the agency's stated goal of improving broadband resiliency. Such an approach would divert valuable personnel resources to reporting events, rather than utilizing such personnel to restore service to consumers. The Commission should instead harmonize any broadband outage reporting obligation to its existing outage reporting requirements for interconnected VoIP, by implementing a two part submission process consisting of a notification within 24 hours of the occurrence, and a final report 30 days later.

The Commission should also reject its proposal to require BIAS providers to act as a “central reporting point for all broadband network outages.” BIAS providers do not have insight into what occurs outside of their respective network or control, and should not be responsible for reporting on such outages. Designating BIAS providers as the central reporting point for broadband outages would actually limit and/or obscure the Commission’s visibility into such outages.

In addition, given that dedicated services are already subject to contractual service quality obligations, such services should be excluded from any outage reporting regime. Any Commission action in this area is wholly redundant and unnecessary, particularly without further explanation as to why the Commission needs the data, how the Commission would process the data, how this data is related to public safety, and what the Commission would do once that data is processed, given that affected parties are already fully compensated and carriers have significant incentives to live up to contractual commitments.

With respect to any framework implemented by the Commission, the information it receives is highly sensitive both in the national security context and for competitive reasons. For this reason alone, any access by a state or federal agency to such data should be extremely limited, and subject to stringent confidentiality provisions to ensure the protection of this sensitive information. State and federal agencies that are granted access to such information should be required to guarantee no less than the same level of confidentiality and protection provided by the Commission.

The Commission already requires providers to report outages that meet specified thresholds and that are attributable to cybersecurity-related events under the NORS. Through the Commission’s Network Outage Reporting System (NORS) portal, providers are already reporting instances of network outages attributable to cybersecurity incidents, while providing general information on the nature, extent and impact of such outages.

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**COMMENTS OF THE
UNITED STATES TELECOM ASSOCIATION**

The United States Telecom Association (USTelecom) respectfully responds to the request of the Federal Communications Commission (Commission),¹ regarding its notice of proposed rulemaking (NPRM) addressing outage reporting.² Citing what it sees as a need for accurate information on service disruptions that could affect homeland security and public safety, the Commission proposes to expand service disruption reporting requirements currently applied to interconnected VoIP providers and to apply those expanded requirements to broadband providers. USTelecom opposes the Commission's proposals to expand outage reporting to broadband internet access service (BIAS) providers.

¹ See, Federal Register Notice, Information Collections Being Submitted for Review and Approval to the Office of Management and Budget, OMB 3060-0298, 3060-0400, 3060-0819, 81 F.R. 48419 (July 25, 2016).

² Report and Order, Further Notice of Proposed Rulemaking, and Order on Reconsideration, *Amendments to Part 4 of the Commission's Rules Concerning Disruptions to Communications*, FCC 16-63, 31 FCC Rcd. 5817, 81 FR 45055 (July 12, 2016) (*Broadband Outage NPRM*).

In addition to the fact that it is premature to establish such reporting obligations, the Commission has failed to identify any public safety benefits that would justify the significant burdens associated with its proposals. Many of the Commission’s proposals are significantly flawed, and would result in a distorted and inaccurate view of any disruptions in broadband networks. Ultimately, adoption of the Commission’s proposals would severely undermine the Commission’s stated foundational aim of protecting life and property through robust, functioning, reliable, resilient, and secure communications networks.³

I. It is Premature for the Commission to Expand its Mandatory Reporting Regime to Broadband Networks.

As the Commission notes in its NPRM, it is seeking to update its part 4 outage reporting requirements to address “more comprehensively the increasingly essential element in our nation’s communications networks: broadband.”⁴ In seeking to expand its reporting obligations to BIAS providers, the Commission justifies its proposed changes to the current reporting framework – in part – to ensure that the agency “keeps pace with technological change,” occurring in the marketplace.⁵ A key driver of this technological change, however, is the manner and extent to which broadband networks are regulated by the Commission, and that decision ultimately rests on the final outcome of the Open Internet litigation. That litigation remains ongoing, and most recently, the U.S. Court of Appeals for the District of Columbia Circuit directed the Commission to file responses to petitions for rehearing *en banc* by September 12, 2016.

USTelecom maintains that it would be more prudent for the Commission to wait until

³ *Broadband Outage NPRM*, ¶ 1.

⁴ *Id.*, ¶ 3.

⁵ *Id.*

final resolution of the Open Internet appeal, before embarking on such an expansive administrative undertaking. It makes little sense for the Commission and industry to embark on such a significant undertaking, given that the Open Internet order could potentially be reversed or significantly altered. In a scenario where the Open Internet decision is altered or reversed, and the Commission has chosen to move forward hastily with its proposals, both the Commission and industry would be forced to invest substantial time and resources to reengineer the established reporting framework.

Moreover, given that the Commission's interconnected VoIP outage reporting framework remains in its early stages, it would be premature to apply this emerging approach more broadly to broadband networks. The Commission acknowledges in the NPRM that its interconnected VoIP reporting framework, implemented in 2012, essentially remains a work in progress.⁶ Before expanding reporting obligations more broadly to broadband services, the Commission should first determine the utility of such reporting within the interconnected VoIP marketplace.

II. The Commission has Failed to Explain any Public Safety Benefits that Justify the Significant Reporting Burdens Associated with its Proposal.

The Commission's purported statutory authority for applying reporting obligations to broadband providers rests largely on its public safety responsibilities. The NPRM, however, lacks any substantive discussion or analysis of the professed public safety benefits that would result from implementation of the Commission's BIAS outage reporting regime. While USTelecom strongly supports efforts to improve the efficiency and reliability of broadband networks, the evidence offered by the Commission in support of its expanded broadband outage reporting proposal falls short of demonstrating that providers, left to their own devices, could not

⁶ *Id.*, ¶ 160 (acknowledging that since extending outage reporting to interconnected VoIP, such reporting has been inconsistent, untimely, and lacking in detail.)

or would not achieve the same public safety benefits in the absence of the Commission’s outage reporting scheme.

For example, the Commission states that mandated reporting obligations would “likely provide” the agency with purported “situational awareness” for broadband networks,⁷ and would “likely provide” it with more “consistent and reliable data” on critical communications outages. This in turn would enable the agency to “perform its mission more effectively in light of evolving technologies and service offerings.”⁸ The Commission, however, does not disclose in any substantive manner how its “situational awareness” will materially improve the reliability and resiliency of broadband networks; nor does it provide any justification for how such data will help the agency “perform its mission more effectively.” Instead, the Commission merely “suggests” that there would be “significant value” in collecting such data, without delineating any specific public safety related benefits.⁹

The Commission attempts to connect its earlier data collection efforts to improved network reliability; however, its assertions are unsubstantiated. For example, in one instance the Commission claims that “review and analysis of outage reports” have enabled the Commission to “facilitate and promote systemic improvements to reliability.”¹⁰ As a basis for this assertion, the Commission further states that many service providers have realized “significant improvements in network reliability” through the efforts of the Communications Security, Reliability and Interoperability Council (CSRIC).¹¹

⁷ *Broadband Outage NPRM*, ¶ 93.

⁸ *Id.*, ¶ 104.

⁹ *Id.*, ¶ 103.

¹⁰ *Id.*, ¶ 104.

¹¹ See e.g., *Broadband Outage NPRM*, n. 315.

USTelecom contends that the Commission overstates the connection between mandated outage reports and the development of voluntary CSRIC best practices. A review of the Working Group 4A report on Best Practices for Reliable 9-1-1 and E9-1-1 (CSRIC WG 4A Report)¹² reveals no link between improved resiliency and greater access to outage reporting data. Rather, the CSRIC WG 4A Report's methodology was based on "existing 9-1-1 standards and best practices from any sources that may have applicability to the identified areas."¹³

Further, CSRIC IV Working Group 7: Legacy Best Practices (CSRIC IV WG 7) report states that, "the primary objective of Best Practices is to provide guidance, based on assembled industry expertise and experience, to improve network security, reliability and resiliency."¹⁴ In order to provide that guidance Best Practices must continuously evolve to provide the most valuable and dependable source of industry guidance. This report reinforces previous guidance that industry Best Practices are voluntary in nature and may not apply in every situation due to the need for flexibility, innovation, and control in the management of different carriers' unique business models, cost, feasibility, resource limitations, or other factors. This guidance is consistent with work completed by previous CSRIC Working Groups in CSRIC II and CSRIC III."¹⁵ These reports make no reference whatsoever to reliance on outage data or to significant improvements in network reliability that occurred through CSRIC efforts.

¹² CSRIC Working Group 4A, Final Report, *Best Practices for Reliable 9-1-1 and E9-1-1*, March 2010 (available at: <https://transition.fcc.gov/pshs/docs/advisory/csric/WG-4A-Final-Report.pdf>) (visited August 23, 2016) (*CSRIC II WG 4A Report*).

¹³ *CSRIC II WG 4A Report*, p. 6.

¹⁴ See, ATIS Network Reliability Steering Committee (NRSC) Best Practice Tutorial Revised February 2014.

¹⁵ CSRIC Working Group 7, Final Report, *Legacy Best Practices*, pp. 3, 6, September, 2014 (available at: <https://transition.fcc.gov/pshs/advisory/csric4/CSRIC%20IV%20WG7%20Legacy%20Best%20Practices%20Final.pdf>) (visited August 26, 2016).

In seeking to establish such a comprehensive reporting regime, the Commission must persuasively demonstrate any public safety and national security benefits, particularly in light of the real costs and administrative burdens that such new reporting requirements will impose on broadband providers. Absent demonstration of such benefits, the Commission must refrain from implementing such a comprehensive change to reporting obligations.

III. The Commission’s Proposed “Hard Down” Outage Metrics and Thresholds Are Overly Broad, and Will Significantly Distort its View of Network Operations.

The Commission’s proposal to implement a throughput-based metric is deeply flawed, and should be abandoned. The Commission proposes to introduce a broadband metric calibrated with the current 900,000 user minute threshold, similar to the one established in its 2004 order for voice outages.¹⁶ Specifically, the Commission proposes that outages be reportable when they result in 1 Gbps of throughput affected in which the event exceeds 22,500 Gbps user minutes and lasts 30 minutes or more. In order for BIAS providers to determine whether an outage event is reportable using this threshold, they would multiply the size of the facility measured in Gbps, by the duration of the event measured in minutes, which would generate a Gbps user minute number.

Decentralized, non-hierarchical, autonomous systems-based IP networks simply do not lend themselves to traditional regulated legacy reporting rules or systems. But despite the substantial differences between traditional POTS and broadband services, the Commission continues to speak of outages in the same terms. For example, the Commission proposes to require a broadband Internet access service provider to submit reports when it has experienced an

¹⁶ *Broadband Outage NPRM*, ¶ 130.

outage or service degradation for at least 30 minutes that potentially affects generally-useful availability and connectivity of at least 900,000 user minutes.¹⁷

While a user minutes standard may be practical in the traditional POTS environment, such an approach in the IPV6 environment would be extremely problematic – if not impossible to implement. Specifically, in the traditional POTS environment, a “user” on any given circuit is a telephone, and therefore presumably, a person. In stark contrast, a “user” in the IPv4 environment – and to a greater extent, the IPv6 environment¹⁸ – is *any* device connected to the network, which can include everything from a laptop computer to –as Cisco notes – a cow.¹⁹ The same Cisco study concluded that by 2008, the number of devices connected to the Internet exceeded the number of people populating the entire planet – and by 2020, Cisco projects there will be 50 billion devices connected to the Internet.²⁰ Ultimately, the Commission’s adoption of a throughput-based metric will significantly compromise the value of its reporting framework by causing over-reporting of purported outages, which will not benefit public safety or yield meaningful data.

For example, service problems that create network outages can occur anywhere in the

¹⁷ *Id.*

¹⁸ There were approximately 4.3 billion IP addresses in the IPv4 environment, which have since been exhausted. *See*, Laurie J. Flynn, *Drumming Up More Addresses on the Internet*, New York Times, February 14, 2011 (available at: <http://www.nytimes.com/2011/02/15/technology/15internet.html?pagewanted=all>) (visited August 24, 2016).). With 128 bits of addressing space, IPv6 can provide a theoretical maximum of about 340 trillion, trillion, trillion addresses. *See*, David Goldman, *The Internet now has 340 trillion trillion trillion addresses*, CNN, June 6, 2012 (available at: <http://money.cnn.com/2012/06/06/technology/ipv6/>) (visited August 24, 2016).

¹⁹ Specifically, the Cisco study notes that a Dutch startup, Sparked, is using wireless sensors on cattle, and each cow transmits 200 mb of data per year. *See*, Arik Hesseldahl, *Cisco Reminds Us Once Again How Big the Internet Is, and How Big It’s Getting*, All Things Digital website, July 14, 2011 (available at: <http://allthingsd.com/20110714/cisco-reminds-us-once-again-how-big-the-internet-is-and-how-big-its-getting/?mod=googlenews>) (visited August 24, 2016).

²⁰ *Id.*

internet – on or off the facilities provided by the carrier required to file the outage report. As a result, the proposed rules will result in unnecessary over-reporting by all providers that peer with a network that is experiencing an outage, or who cannot route packets due to the loss of DNS translations. Thus, reports submitted to the Commission will mislead consumers and policymakers regarding true network reliability. BIAS providers should not be held accountable for outage events that occur outside of their network.

Additionally, the Commission’s compressed reporting deadlines – and potential penalties associated with insufficient and/or late filings – create a high probability that providers will file inaccurate and even unnecessary information, rather than to wait until the provider can file accurate, verified information concerning service outages. BIAS providers will most certainly default to over-reporting out of an abundance of caution – a circumstance that wastes Commission as well as industry resources, and raises costs. These issues combined will create less valuable data for the Commission and industry to act on.

IV. Outage Reporting Requirements Should be Harmonized.

The Commission seeks to apply a three-part reporting structure to covered broadband service providers. Under its proposal, the Commission would require a covered broadband provider to file a notification to the Commission within 120 minutes of discovering a “reportable outage;” an initial report within 72 hours of discovery of the reportable outage; and a final report within 30 days of discovering the outage. USTelecom maintains that the Commission’s proposed three-part submission process for broadband outage reporting is overly burdensome, and would actually undermine the agency’s stated goal of improving broadband resiliency.

First, the individuals that would be responsible for addressing the substantive administrative burdens associated with the proposed outage reporting rules are more often than not the same individuals who are operationally responsible for addressing and responding to

network outages. As a result, companies would be forced to divert valuable personnel resources to report the event, rather than utilizing them to assist in efforts to restore service to consumers.

Second, minimal information may be known by the BIAS provider upon the filing of an initial report (*i.e.*, within 72 hours) – and even less is known within the first 120 minutes. Given the previous discussion regarding the potential for over-reporting of purported outages,²¹ the utility of filing a notification within 120 minutes of a reported outage is highly questionable. Although broadband providers will move swiftly to address such outages occurring on their networks, it is unclear what steps the Commission can (or even should) take to address such outages. The Commission cites to a single instance of an interconnected VoIP outage that was first reported to it twenty-three hours after its discovery, and then asserts that the lack of timely visibility into such outages hinders its ability to “take appropriate remedial actions.”²²

The Commission provides no specifics as to what constitutes these “remedial actions,” and USTelecom asserts that remedial action by the Commission is unnecessary. Industry has a long and successful history of restoration efforts including investment in the personnel and resources necessary to engage in expeditious remedial actions in the rare instances where outages have occurred. This has been a hallmark of industry efforts for several decades, and proposed Commission remedial actions would only insert a layer of regulatory engagement that would unnecessarily interfere with industry restoration efforts.

Moreover, the Commission’s proposal contradicts the spirit of the Obama Administration’s effort to push regulatory flexibility, simplification of reporting and compliance requirements, and reducing regulatory burdens on small businesses (some 3,200 of which would

²¹ *supra*, pp. 6 – 6.

²² *Broadband Outage NPRM*, ¶ 162.

be subject to the proposed requirements).²³ President Obama emphasized in Executive Order Number 13,563,²⁴ that a policy standard works best when it is based on “a reasoned determination that its benefits justify its costs (recognizing that some benefits and costs are difficult to quantify)” and when they “impose the least burden on society, consistent with obtaining regulatory objectives, taking into account, among other things, and to the extent practicable, the costs of cumulative regulations.”²⁵ The Commission should take this guidance to heart as it examines its proposed reporting obligations. The application of outage reporting requirements to Internet Protocol (IP) networks would have substantial costs and little, if any, impact on improving public safety and network performance and reliability.

The Commission should instead harmonize any broadband outage reporting obligation to its existing outage reporting requirements for interconnected VoIP. Specifically, if the Commission imposes broadband outage reporting, it should consist of a two part submission process: 1) notification of an outage within 24 hours of its occurrence; and 2) a final report within 30 days of the outage being discovered. From an administrative efficiency perspective (for both industry and the Commission), it is more sensible to take a two-part submission approach to outage reporting. Such an approach satisfies the Commission’s asserted needs to ensure adequate notice of the outage (accomplished with the first report) and to receive detailed information on the source of the outage (accomplished with the final report).

V. Network Providers Should not be Responsible for Reporting on Outages Occurring Outside of their Respective Networks.

²³ *Broadband Outage NPRM*, Appendix E, Initial Regulatory Flexibility Analysis, ¶¶ 12. – 15.

²⁴ Executive Order No. 13,563, *Improving Regulation and Regulatory Review*, January 18, 2011 (available at: <https://www.whitehouse.gov/the-press-office/2011/01/18/executive-order-13563-improving-regulation-and-regulatory-review>) (visited August 25, 2016).

²⁵ *Id.*, §1(b).

The Commission should reject its proposal to require BIAS providers to act as a “central reporting point for all broadband network outages.”²⁶ BIAS providers do not have insight into what occurs outside of their respective network or control, and should not be responsible for reporting on such outages. As a basis for applying such reporting obligations to broadband providers, the Commission notes that “broadband networks are just as vulnerable to physical outages and service disruptions as the public-switched telephone network (PSTN).”²⁷ Reporting outages of the PSTN, particularly at the time the Part 4 rules were adopted, required a very limited universe of service providers to measure a binary (*i.e.*; on/off) characteristic: Failure generally meant a call was not completed.

Broadband networks, however, are fundamentally different in structure and complexity, and do not fit within the existing outage reporting regime. IP networks differ significantly from the traditional PSTN in terms of structure and complexity, and as such, they do not lend themselves to traditional outage reporting requirements.²⁸ Even in the context of evaluating service quality more generally, the proposals would be of little value, given that they only capture a small link in the chain that makes up any broadband transmission.

These architectural differences are most evident when contrasting the PSTN’s highly-structured hierarchical architecture with the dynamic and distributed architecture of current IP networks. The hierarchical architecture of the PSTN provided simplistic alternate routing at higher levels.²⁹ If a call could not be handled by one level of the structured hierarchy, it would be transferred to the next, thus providing the requisite degree of reliability.

²⁶ *Broadband Outage NPRM*, ¶ 112.

²⁷ *Id.*, ¶ 102.

²⁸ Comments of the United States Telecom Association, *In the Matter of Framework for Broadband Internet Service*, GN Docket No. 10-127, pp. 32 – 38 (Jul. 15, 2010).

²⁹ *Id.*, pp. 34 – 35.

In contrast, IP networks have grown increasingly decentralized and complex throughout their developmental history. As a result, whereas the PSTN constitutes a single network, the Internet is considered a “network of networks” consisting of millions of private, public, academic, business, and government networks.³⁰ With IP networks, an upper level protocol encapsulates communications data (*i.e.*, separates the data from the underlying structure on basis of logical function) into packets that can be switched and routed meaningfully through a complex and multifaceted process. Unlike the PSTN, which requires a physical circuit to be set up for each phone call, IP networks operate using protocols that allow for communications between and among multiple platforms. Thus, in contrast to the simple point-to-point paradigm of the PSTN, IP networks are highly decentralized.

In fact, the decentralized nature of the network, combined with wide adoption of industry best practices, has contributed over time to creating one of the most reliable communications infrastructures in the world. Indeed, today’s Internet – particularly at the core – is an inherently redundant network that is designed to quickly respond to instances of localized disruptions. For example, USTelecom’s member companies apply the Commission’s Network Reliability and Interoperability Councils (NRIC) best practices as appropriate in their networks. These include the use where appropriate of such network engineering measures as route diversity, ring architectures, and other features that provide appropriate redundancy in the design of high capacity circuits, and greater resiliency when underlying network elements experience a failure.

However, despite this resiliency, the decentralized nature of the internet makes it challenging to associate network disruptions with any particular communications or application

³⁰ *Id.*, pp. 35 – 36. *See also*, Annual Report by the ATLAS Internet Observatory, Arbor Networks Inc., University of Michigan, Merit Networks, Inc. (available at: http://www.eecs.umich.edu/eecs/about/articles/2009/Observatory_Report.html (visited August 24, 2016)).

element in an IP network. These characteristics render the Commission’s proposal to require BIAS providers to act as a “central reporting point for all broadband network outages”³¹ particularly problematic, since disruptions in the network can result from occurrences in other parts of the network, ranging from wholesale IP carriers, to consumer premises equipment (CPE) defects, software malfunctions, viruses and malware. Consequently, any reporting mechanism designed to address IP network outages will, by design, only capture a small slice of a much larger network ecosystem – and provide a skewed view of the source and frequency of outages.

Moreover, designating BIAS providers as the central reporting point for broadband outages would actually limit and/or obscure the Commission’s visibility into such outages. For example, some non-BIAS providers may not report such outage information to the BIAS provider – whether for competitive or proprietary reasons. Similarly, given the interconnected nature of the internet, the Commission’s proposal would be confusing for all stakeholders to implement. Should entities providing IP transport that experience an outage on their network report such an outage to *all* of their interconnected BIAS providers, or just those impacted by the outage? If the latter, how would such a determination be made? Similarly, would impacted and non-impacted BIAS providers be under an obligation to report such service disruptions? And what guarantees do BIAS providers have (as well as the Commission) that service level or other agreements could be executed that would require IP transport providers to disclose service disruptions to BIAS providers?³²

³¹ *Broadband Outage NPRM*, ¶ 112.

³² *Id.* (stating that “[d]o or can BIAS providers enter into service level or other agreements that contain requirements that enable them to obtain adequate information concerning the source of outages that originate with such other providers?”).

Despite acknowledging “broadband networks’ interrelated architectural makeup,”³³ the Commission provides no basis for why BIAS providers are uniquely suited to serve the role as the central reporting point. The Commission does not identify a single policy reason regarding why BIAS providers alone should be designated as the central reporting point for all broadband network outages. Absent such a policy analysis, the Commission should refrain from implementing its proposal to place such reporting obligations on BIAS providers.

VI. Dedicated Services are Already Subject to Stringent Contractual Obligations and Should not be Subject to the Proposed Reporting Obligations.

Given that dedicated services are already subject to contractual service quality obligations, such services should be excluded from any outage reporting regime. Under the Commission’s proposed definition, dedicated services have “prescribed performance requirements that include bandwidth, latency, or error-rate guarantees or other parameters that define delivery under a Tariff or in a service-level agreement.”³⁴ In other words, through contract or tariff, customers of dedicated services already have extremely robust – often to 99.99% or more – service guarantees and direct, often bargained-for recourse should service go down. Additionally, because dedicated services are “[s]ervices that transport data between two or more designated points, e.g., between an end user’s premises and a point-of-presence, between the central office of a local exchange carrier (LEC) and a point-of-presence, or between two end user premises,” dedicated services generally only directly affect one customer, who already has guaranteed recourse. Thus, any Commission action in this area is wholly redundant and unnecessary, particularly without further explanation as to why the Commission needs the data,

³³ *Broadband Outage NPRM*, ¶ 103.

³⁴ *See, Id.*, ¶ 115 (defining “dedicated services” as services “with prescribed performance requirements that include bandwidth, latency, or error-rate guarantees or other parameters that define delivery under a Tariff or in a service-level agreement.”).

how the Commission would process the data, how this data is related to public safety, and what the Commission would do once that data is processed, given that affected parties are already fully compensated and carriers have significant incentives to live up to contractual commitments.

As USTelecom recently noted in a separate proceeding before the Commission, the market for dedicated services provided to large enterprise customers is extremely robust and highly competitive.³⁵ Dedicated service providers can also compete for business and differentiate themselves by providing service-level assurances and contractual service level agreements (SLAs). These SLAs commit to providing services at an established level, and often include performance guarantees that cover a broad range of areas, such as guaranteed repair intervals and service availability. Given this competitive marketplace, it makes little sense for the Commission to apply stringent reporting obligations on top of contractual guarantees. The market is evolving rapidly and the Commission should avoid interfering in the relationship between the “old and new” providers and their customers.

VII. It is Imperative that the Commission Protect the Confidentiality of any Information Submitted to it Under any Reporting Framework it Adopts.

With respect to any framework implemented by the Commission, the information it receives is highly sensitive both in the national security context and for competitive reasons. As the Commission notes in the NPRM, the “national defense and public safety objectives the Commission advances in proposing these outage reports would be seriously undermined if the

³⁵ See e.g., Comments of the United States Telecom Association, In the Matter of Business Data Services in an Internet Protocol Environment, WC Docket Nos. 16-143, 15-247, 05-25, RM-10593 (June 28, 2016); see also, Reply Comments of the United States Telecom Association, *In the Matter of Business Data Services in an Internet Protocol Environment*, WC Docket Nos. 16-143, 15-247, 05-25, RM-10593 (August 9, 2016).

Commissioner were to permit these reports to fall into the hands of terrorists who seek to cripple the nation's communications infrastructure.”³⁶

For this reason alone, any access by a state or federal agency to such data should be extremely limited, and subject to stringent confidentiality provisions to ensure the protection of this sensitive information. State and federal agencies that are granted access to such information should be required to guarantee no less than the same level of confidentiality and protection provided by the Commission.

When the Commission adopted outage reporting requirements for carriers in 2004, it amended its rules to provide that outage reports are presumptively protected from public disclosure under Freedom of Information Act (FOIA).³⁷ In addition, the Commission encrypts the data when it transmits it to the Department of Homeland Security.³⁸ The same protective measures should be required of state and federal agencies. Specifically, to the extent the state FOIA or Public Records Acts do not provide equivalent protection as the federal FOIA, the terms of the federal FOIA should apply to any broadband outage information. Moreover, if state and federal agencies are required to transmit the data, they should be required to take appropriate protective measures.

Finally, to ensure the security of this information, access to any such broadband outage information should be limited to specifically identified state and federal agencies personnel with a need to know. This restriction would safeguard against inadvertent disclosure of sensitive

³⁶ *Broadband Outage NPRM*, ¶ 81.

³⁷ Report and Order and Further Notice of Proposed Rule Making, *New Part 4 of the Commission's Rules Concerning Disruptions to Communications*, 19 FCC Rcd. 16830, ¶46 (2004) (*Part 4 Order*).

³⁸ *Part 4 Order*, ¶ 47.

information by limiting its exposure only to those within the state and federal agency that is authorized to access this information.

VIII. The Commission Already Receives Outage Information Associated with Cyber-Related Events, and Additional Reporting Requirements are Unnecessary.

The Commission already requires providers to report outages that meet specified thresholds and that are attributable to cybersecurity-related events under the NORS. Through the Commission's Network Outage Reporting System (NORS) portal, providers are already reporting instances of network outages attributable to cybersecurity incidents, while providing general information on the nature, extent and impact of such outages.

USTelecom is hard-pressed to understand the Commission's apparent readiness to abandon a public-private partnership approach championed by the Chairman and the Public Safety and Homeland Security Bureau over the past several years, which has served as a basis for constructive engagement between industry and the Commission on issues related to cybersecurity. In June 2014, only a few short months into the CSRIC IV WG4 initiative,³⁹ Chairman Wheeler delivered a speech at the American Enterprise Institute laying out what he described as the Commission's "new paradigm."⁴⁰ The Chairman remarked that "we believe there is a new regulatory paradigm where the Commission relies on industry and the market first while preserving other options if that approach is unsuccessful."

In his speech, Chairman Wheeler refers to the policy set by the Administration as early as 2009 when it released the Cyberspace Policy Review and stated that "[o]ur nation chose

³⁹ See, Federal Communications Commission website, *Communications Security, Reliability and Interoperability Council IV* (available at: <https://www.fcc.gov/about-fcc/advisory-committees/communications-security-reliability-and-interoperability-0>) (visited August 26, 2016).

⁴⁰ See, Remarks of FCC Chairman Tom Wheeler, American Enterprise Institute, Washington, D.C., p. 1 (June 12, 2014) (available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-327591A1.pdf) (visited August 25, 2016) (*AEI Speech*).

proactive private sector cyber risk management – and all the corporate responsibilities and accountability that go along with that – over a traditional regulatory approach of prescriptive government mandates.”⁴¹ He went on to remark that the pace of innovation on the Internet is “much, much faster than the pace of a notice-and-comment rulemaking . . . We cannot hope to keep up if we adopt a prescriptive regulatory approach. We must harness the dynamism and innovation of competitive markets to fulfill our policy and develop solutions.”⁴²

While the Chairman points out in his remarks that he is confident that the new paradigm will work, he also states that “we must be ready with alternatives if it doesn’t.”⁴³ It is apparent from the proposals in the NPRM⁴⁴ that the Commission now intends for “other options” representing *ex ante* regulation will supersede reliance on industry and ongoing market initiatives. Without any evidence that industry has failed to meet its obligations in this area, the Commission appears prepared to abandon the new paradigm in favor of the old regulatory paradigm that it previously acknowledged would not work.⁴⁵

⁴¹ *Id.*, p. 3.

⁴² *Id.*, p. 1.

⁴³ *AEI Speech*, p. 1.

⁴⁴ *Broadband Outage NPRM*, ¶¶ 122-128, 164 (discussing reports that include information about “unintended changes to software or firmware or unintended modifications to a database.” *Id.*, ¶ 122.).

⁴⁵ See e.g., Remarks of Chairman Wheeler, *NSTAC Closed Session*, November 19, 2014 (available at: https://apps.fcc.gov/edocs_public/attachmatch/DOC-330574A1.pdf) (stating that if “critically-positioned companies just comply reactively with a regime of prescribed mandatory requirements then our networks will always be a step behind. This is particularly true vis-a-vis aggressors. These threats move faster than a notice-and-comment rulemaking process. We need a solution that allows companies to move faster as well, both for their own good, and for the good of the nation.”); see also, Remarks of FCC Chairman Tom Wheeler, RSA Conference, April 21, 2014 (available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-333127A1.pdf) (visited August 26, 2016) (stating that the Commission’s belief is that “the paradigm for cybersecurity is proactive and accountable self-governance within mutually agreed parameters. This isn’t an ideological matter, but simple a logical conclusion. Things change so fast in the cyber world that prescriptive regulations could never hope to keep pace.”).

We now mark almost eighteen months since the Communications Sector delivered its CSRIC IV Working Group 4 Final Report, and there is no evidence that industry has failed to deliver on the recommendations. Yet in the current proceeding, the Commission has chosen the very notice and comment path that the Chairman consistently portrayed as ineffective. In the absence of a clear industry failure to ensure network reliability, the Commission should stay the course embodied in the new paradigm and avoid the siren calls for heavy-handed regulation.

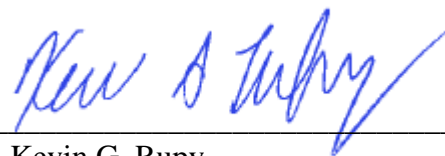
IX. Conclusion

For the foregoing reasons, USTelecom opposes the Commission's proposals to expand outage reporting to BIAS providers. It is premature to establish such reporting obligations, and the Commission has failed to identify any public safety benefits that would justify the significant burdens associated with its proposals. Many of the Commission's proposals are significantly flawed, and would result in a distorted and inaccurate view of any disruptions in broadband networks. Ultimately, adoption of the Commission's proposals would severely undermine the Commission's stated foundational aim of protecting life and property through robust, functioning, reliable, resilient, and secure communications networks.

Respectfully submitted,

United States Telecom Association

By: _____



Kevin G. Rupy
Robert Mayer

607 14th Street, NW, Suite 400
Washington, D.C. 20005
(202) 326-7300

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